# DEPARTMENT OF ENVIRONMENTAL MANAGEMENT INDIANAPOLIS

#### **OFFICE MEMORANDUM**

TO:

Ryan Groves

IDEM – State Cleanup Program

DATE: October 26, 2010

FROM:

Megan Nagle

IDEM - Wetland and Storm Water Section

THRU: Randy Braun

SUBJECT: Site Visit Summary for Ecological Systems Inc. conducted on October 19, 2010, located at 4910 West 86<sup>th</sup> Street, Indianapolis, Marion County, Indiana.

## **Site History**

Ecological Systems Inc. representatives declared bankruptcy and abandoned the Site located at 4910 West 86<sup>th</sup> Street, Indianapolis, Indiana. U.S. EPA respondents arrived on site on October 8, 2010.

#### **Site Visit Findings**

IDEM representatives, Megan Nagle and Natalie Maupin, visited the Ecological Systems Inc. (ESI) site on October 19, 2010, to gather additional information and assess the storm water drainage on, through, and from the Site. Mapping of the storm sewer system was conducted. It was determined that there are a total of twenty-nine (29) inlets located on the ESI property.

Each inlet is connected to the on-site storm sewer system. The storm sewer system either drains to the concrete access pit, or the Oil Pit. The storm water that enters the concrete access pit is conveyed to the two Million Gallon Tanks, also known as "The Millions". Since the closure of the sluice gates on October 9, 2010, water and sludge from the storm sewer inlets has been manually pumped from each inlet, as well as from the concrete access pit, and pumped into the west million gallon tank. Storm sewers 5, 6, 10, 11, 12, 13, and 14 (as depicted and identified on the GIS Map created by IDEM) drain to the Oil Pit located west of the truck unloading building "Building 1".

There were five frac tanks abandoned on site, including tank 7, 8, 9, 10, and 11, four of which were partially empty. At the time of the inspection, there were only two tanks with available capacity for containment. The frac tanks which were empty were frac tanks 7, 9, and 10. Frac tank 10 was nearly full as of the date of the inspection. Each frac tank holds approximately 22,000 gallons.

Additionally, ESI left waste materials exposed and uncontained. The waste materials include oil sludge located near the oil solidification pits, uncontained fly ash, and oil/oily residue. The volume of the left over oil sludge has been estimated to be approximately two truck loads. The secondary containment surrounding the "finished product—

recycled oil" tanks was holding oil and water. The tank used to store fly ash was left open, and due to poor housekeeping and lack of material management the material was not contained within the primary holding tank, nor was it contained within the secondary containment. The secondary containment for the fly ash appears to be plumbed to drain to the storm sewer system.

Several storm sewers appeared to be used for improper disposal of materials (unknown). This observation was documented in photos of the storm sewer inlet titled SS20, SS22, and SS25. Further discussion of the status of the Site and potential for pollutants on site is discussed within the photographic documentation (attached).

## **Conclusion and Recommendations:**

Considering the state of the ESI property and extent of contamination that is visually present it has been determined that all storm water from the site is considered to have a high potential for carrying Oil and Grease, Total Suspended Solids (unknown material makeup), and is a concern if discharged without appropriate pretreatment to a Water of the State.

Prior to allowing surface discharges, discharges must meet surface water quality standards. ARARs may need to be calculated, but prior to being able to create ARAR standards the type of treatment would need to be decided.

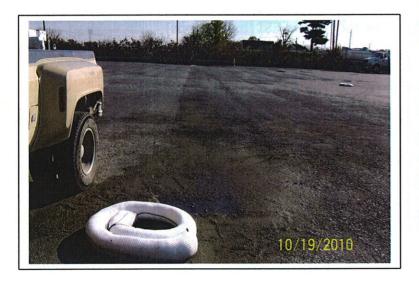
It is highly suggested at this time that all storm water is continued to be managed as wastewater and a plan to fully contain it on site should be carried out for the extent of the time that it will take to properly dispose of waste materials and clean the surfaces of the site or eliminate the potential for storm water to come in contact with the industrial materials and pollutants on site.

Enclosures: Photographic documentation for inspection conducted on October 19,

2010

Ec: Anita Boseman, U.S. EPA

Verneta Simon, U.S. EPA Carol Staniec, U.S. EPA Harry Atkinson, IDEM Randy Braun, IDEM Natalie Maupin, IDEM



Photographer: Megan Nagle

Date & Time: 10-19-2010 10:41 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of manhole identified as storm sewer (SS) 1. Photograph was

taken facing east.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 10:44 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of manhole identified as SS2. Potential for Oil and Grease is moderate to high due to it being located next to the truck

sampler.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 10:47AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of manhole identified

as SS3. Receives runoff from truck sampler.



Photographer: Megan Nagle

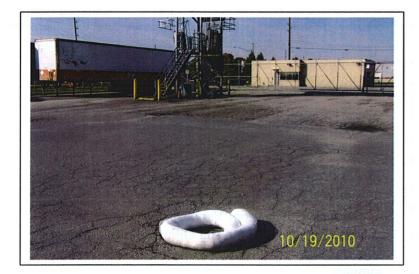
Date & Time: 10-19-2010 10:50 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of manhole

identified as SS2 and truck sampler.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 10:57 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of manhole identified as SS4. SS4 is a low point and the

potential for O&G is moderate to high.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 11:00 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of manhole

identified as SS5, potential for O&G is high. SS5 receives roof runoff, and the runoff drains to the Oil

Pit on opposite side of truck unloading building.



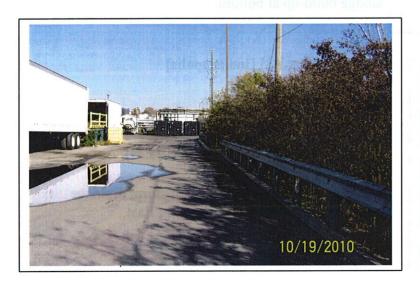
Photographer: Megan Nagle

Date & Time: 10-19-2010 11:05 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of manhole identified as SS6. The potential for O&G is high, receives roof drain runoff. Drains to Oil Pit on opposite side of truck unloading building.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 11:12 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: Potential Discharge Point (PDP) 1 located south of the scale, along the eastern border of the property. Without containment or pumping of storm drains a heavy rain event could cause sheetflow from this drainage area to the tributary to Oil Creek.

Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 11:20 AM

Others Present: Natalie Maupin (IDEM), Anita

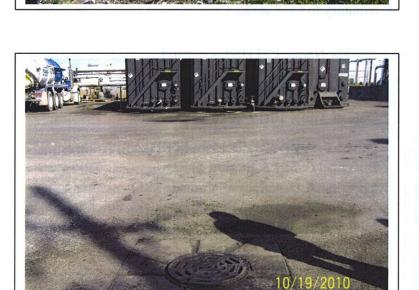
Boseman (USEPA Region 5)

Location & Description: View of SS8. Located beneath the tote/drum unloading dock. Potential for total suspended solids (TSS) and O&G is high.









Photographer: Megan Nagle

Date & Time: 10-19-2010 11:29 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of PDP2 and SS7 (in distance). The truck scale perimeter holds a lot of water, possible seepage thru curb, unsure of integrity of structural containment, and high potential for O&G. Water depth was measured with a drum sampler at 3'8" and there is a potential for sludge build-up at bottom.

Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 11:30 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of storm drainage

ditch, photograph was taken facing East.

Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 11:33 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS9, extremely low point, receives runoff from used oil frac tanks, and visibly stained surface. There are four frac tanks in the background (7, 8, 9, 10). Frac tank 7, 9, and 10 were empty. EPA has filled 10 with material pumped from storm sewers. Each tank holds 22,000 gallons.



Photographer: Megan Nagle

Date & Time: 10-19-2010 11:44 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS11 located north of Building 1. The concrete surrounding the drain is stained, receives runoff (contaminated Building 1

north side). Believed to drain to Oil Pit.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 11:45AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of roof drain on

Building 1 and stained concrete.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 11:49 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS12. Receives roof drain runoff from Building 1 (northwest side).

Believed to drain to Oil Pit.



Photographer: Megan Nagle

Date & Time: 10-19-2010 11:57 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS14, believed to

drain to Oil Pit.



Facility Name: ESI [Indianapolis]

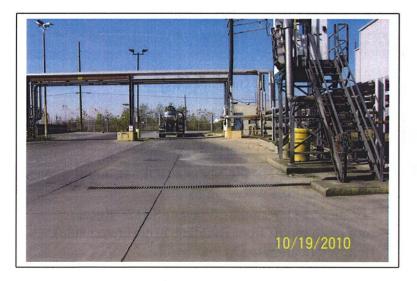
Photographer: Megan Nagle

Date & Time: 10-19-2010 11:59 AM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS15, receives runoff from immediate parking lot area. High potential for TSS and O&G from stained area.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:07 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: Truck drain located next to

loading station.



Photographer: Megan Nagle

Date & Time: 10-19-2010 12:08 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: Stained surfaces next to

loading station.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:08 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: Stained surfaces next to

loading station.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:10 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS16, receives runoff from used oil frac tanks, and surrounding stained surface area. High potential for TSS/O&G.



Photographer: Megan Nagle

Date & Time: 10-19-2010 12:10 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS16, receives runoff from used oil frac tanks, and surrounding stained surface area. High potential for TSS/O&G.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:13 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS17, receives runoff from used oil frac tanks, stained surface area,

and high potential for TSS/O&G.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:21 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS19, receives runoff from stained concrete. Located just east of

Building 2.



Photographer: Megan Nagle

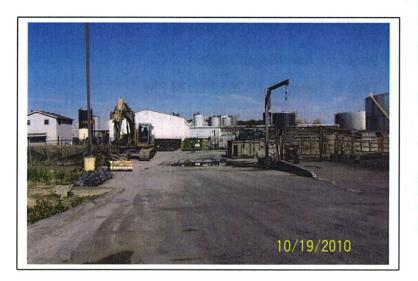
Date & Time: 10-19-2010 12:23 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS20, receives runoff from roof drains from northeast corner of

Building 2.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:25 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: Stockpiled oil sludge area, surface drainage puddles or flows back into pits.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

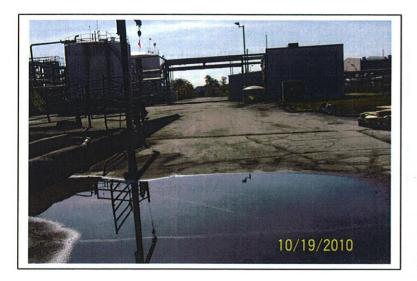
Date & Time: 10-19-2010 12:25 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: breach in berm, located

near oil sludge storage.



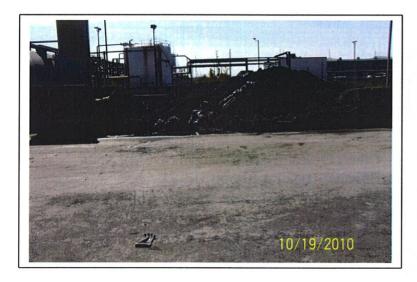
Photographer: Megan Nagle

Date & Time: 10-19-2010 12:26 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description:



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:28 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: North side of stockpiled oil sludge, subject to being mobilized during a rain event. Runoff drains to solidification pits. Potential

for off-site discharge is low.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:32 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: Pooling water near the

solidification pits.



Photographer: Megan Nagle

Date & Time: 10-19-2010 12:32 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of the areas located

south of the solidification pits.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:42 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS21, receives secondary containment water from fly ash tank, tank

is open and waste is exposed.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:43 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS22, next to empty totes, heavy solidification in drain. Appears

that totes were emptied directly into the drain.



Photographer: Megan Nagle

Date & Time: 10-19-2010 12:43 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of materials within

SS22.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:43 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: Close-up view of materials

within SS22.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:51 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS23, heavy staining surrounding the drain with a high potential for O&G. Pumping of the drain was initiated on 10/15/2010, still pumping at the time of the site visit

on 10/19/2010.



Photographer: Megan Nagle

Date & Time: 10-19-2010 12:51 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of area west of

SS23.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:53 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of upland area,

located in northwest corner of property.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 12:55 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of material storage and operations surrounding SS23 and Million

Gallon tanks (2).





Photographer: Megan Nagle

Date & Time: 10-19-2010 12:55 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS24.

Surrounding area is heavily stained, high potential for O&G, receives runoff from Building 5. This is the drain which EPA proposes to attach a culvert pipe and discharge from storm sewer system to

tributary to Oil Creek.



Facility Name: ESI [Indianapolis]

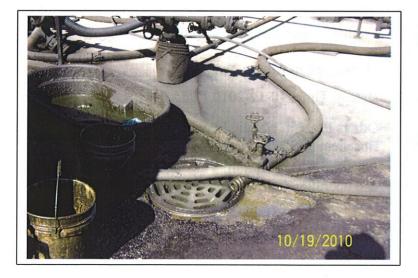
Photographer: Megan Nagle

Date & Time: 10-19-2010 12:55 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of frac tank#11.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 1:02 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS25. HEAVILY

STAINED. Located East of Building 5. High

potential for O&G.



Photographer: Megan Nagle

Date & Time: 10-19-2010 1:06 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: Additional view of SS25.

It appears there were oil wastes being pumped

directly into the storm drain.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 1:16 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS28, heavily

stained. SS28 receives runoff from area

contaminated by "Fry Basket".



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 1:17 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS28, photograph

taken facing East.



Photographer: Megan Nagle

Date & Time: 10-19-2010 1:17 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of "fry pit".



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 1:18 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of oil within the

secondary containment.



Facility Name: ESI [Indianapolis]

Photographer: Megan Nagle

Date & Time: 10-19-2010 1:27 PM

Others Present: Natalie Maupin (IDEM), Anita

Boseman (USEPA Region 5)

Location & Description: View of SS29, heavily

soiled with sludge.